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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,589	09/05/2003	Kazushige Oki	50212-533	7325
20277	7590	04/14/2005	EXAMINER	
MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			LIN, TINA M	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 04/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/655,589	Applicant(s) OKI, KAZUSHIGE	
	Examiner Tina M. Lin	Art Unit 2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/7/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

Claim 1 is objected to because of the following informalities: On line 6 of claim 1, the word "coupling" appears to be a typographical error. The Examiner believes the word should read "coupled". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,863,448 to Chiu et al.

In regards to claim 1, Chiu et al discloses a housing (400) having a lower casing (301 with a receptacle (103) for mating with an optical connector (161), a mount (309), an upper casing (303) being engaged with the lower casing, a cover (401) for covering the upper casing, an optical sub-assembly (411) coupled with the connector in the receptacle, a circuit board (200, 250) electrically connected to the sub-assembly and mounted on the mount of the lower casing and a block (120) mounted to the lower casing for defining the relative positions of the optical components. Although Chiu et al fails to disclose the block mounted on the lower casing, Chiu et al does disclose the block mounted to the lower casing. Since Applicant has not disclosed that mounting the block on the lower casing solves any stated problem or is for any particular purpose, and it appears the invention would perform equally as well with the block mounted to

the lower casing, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have mounted the block to the lower casing in any fashion as long as the block is securely fastened and defines a relative position for the optical components. (Figure 1, 2, 3, 4A and 5)

In regards to claim 2, Chiu et al discloses all discussed in claim 1 above and further discloses the receptacle (103) of the lower casing (301) having an abutting surface (305A) for abutting against one surface of the block, where the surface of the block and the abutting surface provides an opening (155) for receiving the sub-assembly.

In regards to claim 3, Chiu et al discloses all discussed in claim 2 above and further discloses a block (120) comprising a mounting portion (127/128) for mounting the sub-assembly, a holding portion (201) for holding the circuit board, a pressing portion (201) for pressing the circuit board where the sub-assembly (411) is mounted to the mounting portion, the leading end (355A) of the sub-assembly is being inserted into an opening (155) formed on one surface and the circuit board is held between the holding and pressing portions.

In regards to claim 4, Chiu et al discloses all discussed in claim 3 above and further discloses the block to additionally comprise a center wall and a pair of side walls, where the mounting portion is disposed between the center wall and one side wall. Although Chiu et al does not specifically disclose the center wall to provide the holding portion and the sidewalls to provide the pressing portion, Chiu et al does disclose the holding and pressing portions are coupled to the center and sidewalls and the pressing and holding portions disclosed by Chiu et al perform the same function as disclosed by Applicant. Furthermore, Applicant has not stated that by providing the holding portion on the center wall and providing the pressing portion on the

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side walls solves any stated problem or is for any particular purpose, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have placed the pressing portion and the holding portion either on the sidewalls and center wall or coupled to the sidewalls and center wall since in either position, the holding and pressing portions perform the same function.

In regards to claim 5, Chiu et al discloses all discussed in claim 2 above but fails to disclose the block being held between a side face of the projection and the abutment surface. However, Chiu et al does disclose the lower casing to have a projection (355A) at the mount. Even though the block is not held between the side face of the projection and the abutment surface, the block is held by the side face of the projection and the abutment surface. Since the block is securely fastened by both configuration of parts, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have held the block in either configuration since the same result (securing the block) is achieved.

In regards to claim 6, Chiu et al discloses all discussed in claim 2 above and further discloses the block to provide a first cut out (407), the lower casing having a second cutout (315) and the upper casing to provide first and second protrusions (313) for engaging with the second cutout. But Chiu et al fails to disclose the first cutout to engage with a protrusion on the upper casing. However, Chiu et al does disclose the first cutout to engage with a tab (405) on the cover. Since all of the casings and covers are integrated into one component as the final result and Applicant has not stated that the first cutout engaging with a protrusion on the upper casing solves any stated problem or is for any particular purpose, it would have been obvious at the time

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the invention was made to a person having ordinary skill in the art to have engaged and integrated all of the components in order to obtain a stable single component.

In regards to claim 7, Chiu et al discloses all discussed above in claim 6 and further discloses a mounting block for mounting an optical device, a center wall, a pair of side walls, where a mounting portion (127/128) is disposed between the center wall and one of the side walls and a first cutout (157) formed in the sidewall.

In regards to claim 8, Chiu et al discloses all discussed above in claim 6 and further discloses a second cut out (315) formed on the sidewall of the lower casing.

In regards to claim 9, Chiu et al discloses all discussed above in claim 2 above and further discloses an upper casing (303) with a cutout (317), where the block further comprises a center wall and a pair of side walls, the center wall having a protrusion (319), where the sidewall of the projection and the cross section come in contact with each other. Although Chiu et al disclose the upper casing with a cutout and the block with the protrusion (opposite of Applicant); the block and the upper casing are still joined together by a cutout and protrusion method. Since Applicant has not disclosed by placing the protrusion on the upper casing and the cutout on the block solves any stated problem or is for any particular reason and it appears the invention would perform equally with the cutout and the protrusion were placed on the upper casing and the block, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have use either configuration of the cutout and protrusion.

In regards to claim 10, Chiu et al discloses all discussed above in claim 1 and further discloses a holder (201) for holding the optical subassembly, a block (120) with a pair of sidewalls, where a concavity (128) is formed in an inner face of the side walls and the leading

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end (111) of the holder is inserted into the concavity. But Chiu et al fails to disclose the holder to surround the outside of the sub-assembly. However, Chiu et al does disclose the holder to hold the circuit boards on the outside. Since surrounding the sub-assembly and holding the circuit boards on the outside both perform the same function that of holding the sub-assembly in place and Applicant does not disclose surrounding the sub-assembly to solve any stated problem or is for any particular reason and it appears the invention would work equally as well with the holder holding the outside of the circuit board, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have used either configuration of parts.

In regards to claim 11, Chiu et al discloses all discussed above in claim 1, but fails to disclose the block to be made of resin. However, a resin material is commonly used in a fiber optic connector block, since resin is a good insulator. Therefore it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have used a resin material for the block in a fiber optic connector.

In regards to claim 12, Chui et al discloses a housing (400) having a lower casing (301 with a receptacle (103) for mating with an optical connector (161), a mount (309), an upper casing (303) being engaged with the lower casing, a cover (401) for covering the upper casing, an optical sub-assembly (411) coupled with the connector in the receptacle, a circuit board (200, 250) electrically connected to the sub-assembly and mounted on the mount of the lower casing and a block (120) mounted to the lower casing for defining the relative positions of the optical components. Chiu et al further discloses the receptacle (103) of the lower casing (301) having an abutting surface (305A) for abutting against one surface of the block, where the surface of the

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block and the abutting surface provides an opening (155) for receiving the sub-assembly. Chiu et al discloses also discloses the block to additionally comprise a center wall and a pair of sidewalls, where the mounting portion is disposed between the center wall and one sidewall. Furthermore, Chiu et al discloses a block (120) comprising a mounting portion (127/128) for mounting the sub-assembly, a holding portion (201) for holding the circuit board, a pressing portion (201) for pressing the circuit board where the sub-assembly (411) is mounted to the mounting portion, the leading end (355A) of the sub-assembly is being inserted into an opening (155) formed on one surface and the circuit board is held between the holding and pressing portions. Lastly, Chiu et al discloses the block to provide a first cut out (407), the lower casing having a second cutout (315) and the upper casing to provide first and second protrusions (313) for engaging with the second cutout.

Although Chiu et al fails to disclose the block mounted on the lower casing, Chiu et al does discloses the block mounted to the lower casing. Since Applicant has not disclosed that mounting the block on the lower casing solves any stated problem or is for any particular purpose, and it appears the invention would perform equally as well with the block mounted to the lower casing, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have mounted the block to the lower casing in any fashion as long as the block is securely fastened and defines a relative position for the optical components. (Figure 1, 2, 3, 4A and 5)

Additionally, Chiu et al does not specifically disclose the center wall to provide the holding portion and the sidewalls to provide the pressing portion, Chiu et al does disclose the holding and pressing portions are coupled to the center and sidewalls and the pressing and

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holding portions disclosed by Chiu et al perform the same function as disclosed by Applicant. Furthermore, Applicant has not stated that by providing the holding portion on the center wall and providing the pressing portion on the side walls solves any stated problem or is for any particular purpose, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have placed the pressing portion and the holding portion either on the sidewalls and center wall or coupled to the sidewalls and center wall since in either position, the holding and pressing portions perform the same function.

Chiu et al further fails to disclose the first cutout to engage with a protrusion on the upper casing. However, Chiu et al does disclose the first cutout to engage with a tab (405) on the cover. Since all of the casings and covers are integrated into one component as the final result and Applicant has not stated that the first cutout engaging with a protrusion on the upper casing solves any stated problem or is for any particular purpose, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have engaged and integrated all of the components in order to obtain a stable single component.

In regards to claim 13, Chiu et al discloses a housing (400) having a lower casing (301) with a receptacle (103) for mating with an optical connector (161), a mount (309), an upper casing (303) being engaged with the lower casing, a cover (401) for covering the upper casing, an optical sub-assembly (411) coupled with the connector in the receptacle, a circuit board (200, 250) electrically connected to the sub-assembly and mounted on the mount of the lower casing and a block (120) mounted to the lower casing for defining the relative positions of the optical components. Chiu et al further discloses the receptacle (103) of the lower casing (301) having an abutting surface (305A) for abutting against one surface of the block, where the surface of the

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block and the abutting surface provides an opening (155) for receiving the sub-assembly and a block (120) comprising a mounting portion (127/128) for mounting the sub-assembly, a holding portion (201) for holding the circuit board, a pressing portion (201) for pressing the circuit board where the sub-assembly (411) is mounted to the mounting portion, the leading end (355A) of the sub-assembly is being inserted into an opening (155) formed on one surface and the circuit board is held between the holding and pressing portions. Chiu et al also discloses an upper casing (303) with a cutout (317), where the block further comprises a center wall and a pair of side walls, the center wall having a protrusion (319), where the sidewall of the projection and the cross section come in contact with each other and the block to provide a first cut out (407), the lower casing having a second cutout (315) and the upper casing to provide first and second protrusions (313) for engaging with the second cutout.

Although Chiu et al fails to disclose the block mounted on the lower casing, Chiu et al does disclose the block mounted to the lower casing. Since Applicant has not disclosed that mounting the block on the lower casing solves any stated problem or is for any particular purpose, and it appears the invention would perform equally as well with the block mounted to the lower casing, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have mounted the block to the lower casing in any fashion as long as the block is securely fastened and defines a relative position for the optical components. (Figure 1, 2, 3, 4A and 5)

Additionally, Chiu et al disclose the upper casing with a cutout and the block with the protrusion (opposite of Applicant); the block and the upper casing are still joined together by a cutout and protrusion method. Since Applicant has not disclosed by placing the protrusion on

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the upper casing and the cutout on the block solves any stated problem or is for any particular reason and it appears the invention would perform equally with the cutout and the protrusion were placed on the upper casing and the block, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have use either configuration of the cutout and protrusion.

Furthermore, Chiu et al fails to disclose the block to be made of resin. However, a resin material is commonly used in a fiber optic connector block, since resin is a good insulator. Therefore it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have used a resin material for the block in a fiber optic connector.

Lastly, Chiu et al also fails to disclose the first cutout to engage with a protrusion on the upper casing. However, Chiu et al does disclose the first cutout to engage with a tab (405) on the cover. Since all of the casings and covers are integrated into one component as the final result and Applicant has not stated that the first cutout engaging with a protrusion on the upper casing solves any stated problem or is for any particular purpose, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have engaged and integrated all of the components in order to obtain a stable single component.

The documents submitted by applicant in the Information Disclosure Statement have been considered and made of record. Note attached copy of form PTO-1449.

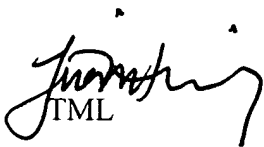
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reference B discusses an alternative configuration of an optical connector.

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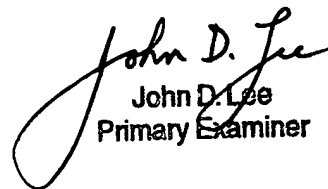
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tina M. Lin whose telephone number is (571) 272-2352. The examiner can normally be reached on Monday-Friday 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Handwritten signature of TML.



Handwritten signature of John D. Lee.

John D. Lee
Primary Examiner